



Brien Holden®
VISION INSTITUTE

ACADEMY

Global Optometry Resources

Ocular Anatomy and Physiology





Brien Holden Vision Institute

OCULAR ANATOMY AND PHYSIOLOGY

STUDENT MANUAL

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Brien Holden Vision Institute Foundation (formerly ICEE) is a Public Health division of Brien Holden Vision Institute

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COURSE OUTLINE

COURSE AIM

This module aims to provide the student with an understanding of the normal anatomy and physiology of the eye.

COURSE OBJECTIVES

By the end of this module the student should be able to understand the anatomical and functional relationships between the eye structures and the brain and recognize the fundamental anatomical substrates underlying ocular pathology.

By the end of the module the student should be able to:

- Describe the anatomy of the normal eye and orbit
- Explain the physiological functions of each part of the eye
- Explain the eye-brain relationship

COURSE CONTENT

The topics covered in this course include:

- Osteology and orbital contents
- The cornea and sclera
- The chambers of the eye and related structures
- The uveal tract
- The lens
- The retina and optic nerve
- The ocular adnexa and lacrimal apparatus
- The extraocular muscles
- Regions of the brain important for vision
- Vascular and neural supply to the eye and orbit

COURSE DELIVERY

This module is designed to be delivered over 1 semester. Total delivery time for Ocular Anatomy and Physiology is 28 hours of lectures.

Learning and Teaching Methods & Resources

The suggested teaching methods for this course include: PowerPoint presentations, tutorials, discussions, question and answer sessions, and self-directed study.

Suggested equipment for teaching includes:

- Computer & projector
- White board
- Handouts

RECOMMENDED ASSESSMENT

- Written examination

TEXT BOOKS

Prescribed texts

- Brien Holden Vision Institute Global Optometric Resources:
<http://www.brienholdenvision.org/education/optometry-resources.html>
- Snell RS, Lemp MA, Clinical Anatomy of the Eye. Blackwell Science Inc., 1998
- Remington LA, Clinical Anatomy of the Visual System, 3rd edition, Butterworth-Heinemann, 2011
- Bron AJ, Tripathi RC and Tripathi BJ. Wolff's Anatomy of the eye and orbit. 1997. A Hodder Arnold Publication



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